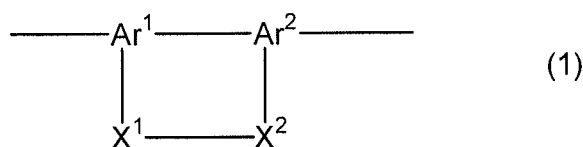


## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

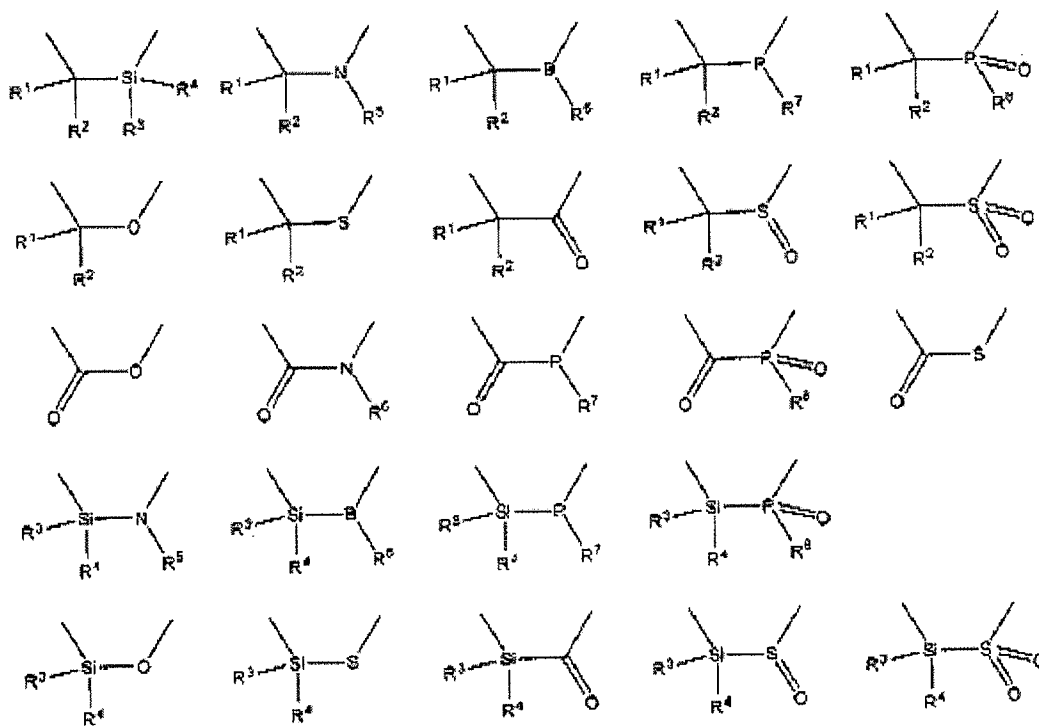
### LISTING OF CLAIMS:

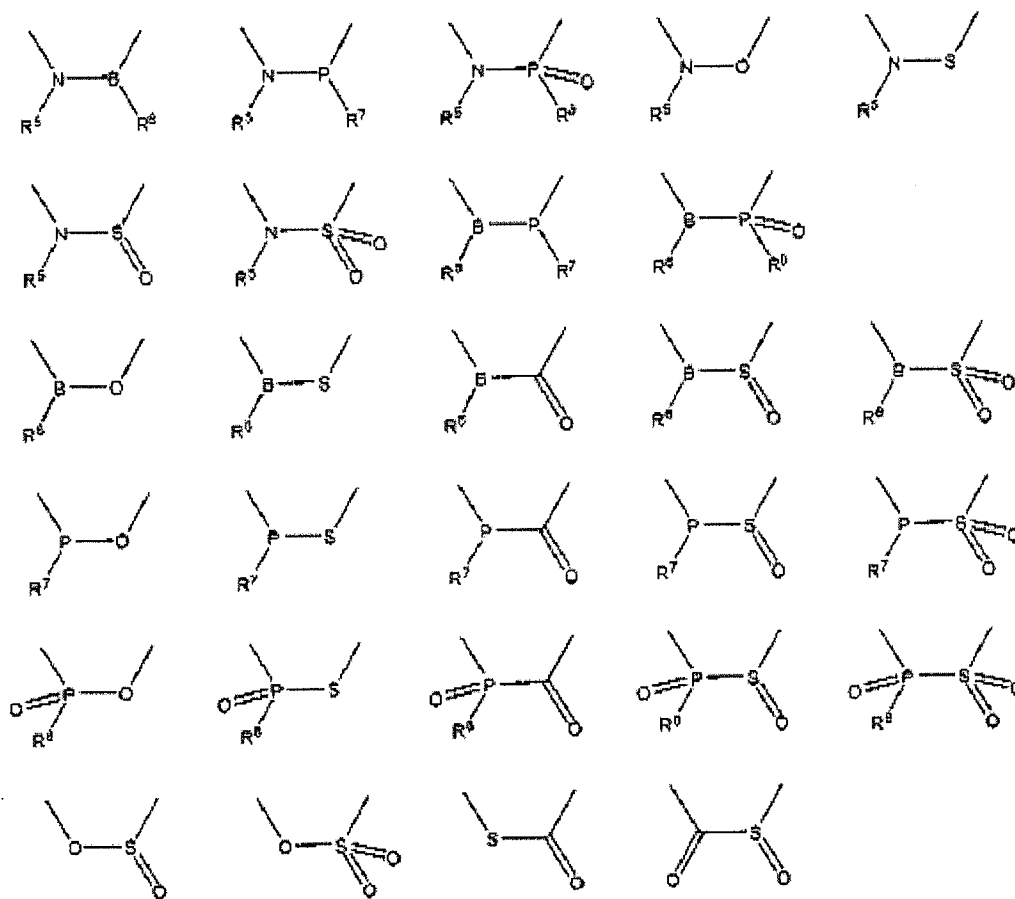
1. (currently amended): A polymer compound comprising a repeating unit of below formula (1) or (2), and having a polystyrene reduced number average molecular weight of  $10^3$  to  $10^8$ ,



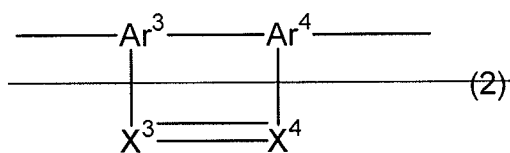
wherein,  $\text{Ar}^1$  and  $\text{Ar}^2$  each independently represent a trivalent aromatic hydrocarbon group or a trivalent aromatic heterocyclic group having adjacent carbons,

$\text{---X}^1\text{---X}^2\text{---}$  represents a group selected from:



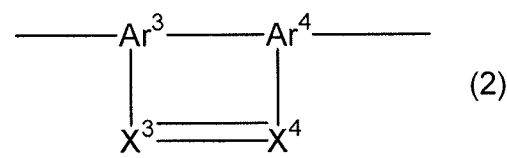


~~X<sup>1</sup> and X<sup>2</sup> each independently represent O, S, C(=O), S(=O), SO<sub>2</sub>, C(R<sup>1</sup>)(R<sup>2</sup>), Si(R<sup>3</sup>)(R<sup>4</sup>), N(R<sup>5</sup>), B(R<sup>6</sup>), P(R<sup>7</sup>) or P(=O)(R<sup>8</sup>), and wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> each independently represent a hydrogen atom, halogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, arylalkylthio group, acyl group, acyloxy group, amide group, acid imide group, imine residue, amino group, substituted amino group, substituted silyl group, substituted silyloxy group, substituted silylthio group, substituted silylamino group, a monovalent heterocyclic group, arylalkenyl group, arylethynyl group, carboxyl group or cyano group, R<sup>1</sup> and R<sup>2</sup>, or R<sup>3</sup> and R<sup>4</sup> may be connected mutually to form a ring, X<sup>1</sup> and X<sup>2</sup> are not the same, X<sup>1</sup> and Ar<sup>2</sup> bond to adjacent carbons in the aromatic ring of Ar<sup>1</sup>, and X<sup>2</sup> and Ar<sup>1</sup> bond to adjacent carbons in the aromatic ring of Ar<sup>2</sup>,~~



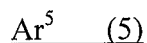
wherein,  $\text{Ar}^3$  and  $\text{Ar}^4$  each independently represent a trivalent aromatic hydrocarbon group or a trivalent heterocyclic group,  $\text{X}^3$  and  $\text{X}^4$  each independently represent N, B, P, C(R<sup>9</sup>) or Si(R<sup>10</sup>), and wherein R<sup>9</sup> and R<sup>10</sup> each independently represent a hydrogen atom, halogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, arylalkylthio group, acyl group, acyloxy group, amide group, acid imide group, imine residue, amino group, substituted amino group, substituted silyl group, substituted silyloxy group, substituted silylthio group, substituted silylamino group, a monovalent heterocyclic group, arylalkenyl group, arylolefinyl group, carboxyl group or cyano group,  $\text{X}^3$  and  $\text{X}^4$  are not the same,  $\text{X}^3$  and  $\text{Ar}^4$  bond to adjacent carbons in the aromatic ring of  $\text{Ar}^3$ , and  $\text{X}^4$  and  $\text{Ar}^3$  bond to adjacent carbons in the aromatic ring of  $\text{Ar}^4$ .

2. (currently amended): A polymer compound according to Claim 1, wherein  $\text{X}^1$  of formula (1) is C(R<sup>1</sup>)(R<sup>2</sup>), Si(R<sup>3</sup>)(R<sup>4</sup>), N(R<sup>5</sup>), B(R<sup>6</sup>), P(R<sup>7</sup>) or P(=O)(R<sup>8</sup>), wherein R<sup>1</sup>-R<sup>8</sup> represent the same meaning as in Claim 1 comprising a repeating unit of below formula (2), and having a polystyrene reduced number average molecular weight of 10<sup>3</sup> to 10<sup>8</sup>,



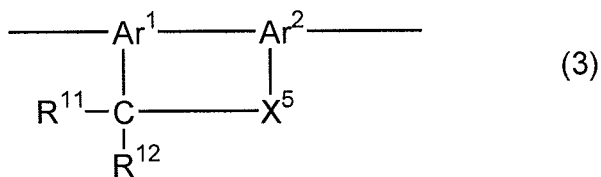
wherein,  $\text{Ar}^3$  and  $\text{Ar}^4$  each independently represent a trivalent aromatic hydrocarbon group or a trivalent aromatic heterocyclic group,  $\text{X}^3$  and  $\text{X}^4$  each independently represent N, B, P, C(R<sup>9</sup>) or Si(R<sup>10</sup>), and wherein R<sup>9</sup> and R<sup>10</sup> each independently represent a hydrogen atom, halogen atom,

alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, arylalkylthio group, acyl group, acyloxy group, amide group, acid imide group, imine residue, amino group, substituted amino group, substituted silyl group, substituted silyloxy group, substituted silylthio group, substituted silylamino group, a monovalent heterocyclic group, arylalkenyl group, arylolefinyl group, carboxyl group or cyano group, X<sup>3</sup> and X<sup>4</sup> are not the same, X<sup>3</sup> and Ar<sup>4</sup> bond to adjacent carbons in the aromatic ring of Ar<sup>3</sup>, and X<sup>4</sup> and Ar<sup>3</sup> bond to adjacent carbons in the aromatic ring of Ar<sup>4</sup>,  
and further comprising the repeating unit represented by the below formula (5),



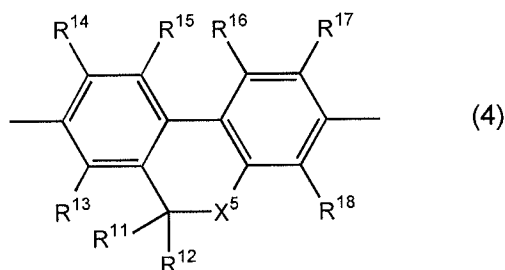
wherein Ar<sup>5</sup> represents a divalent heterocyclic group.

3. (currently amended): A polymer compound according to claims 1 ~~or~~ 2, wherein the repeating unit represented by the above formula (1) is a repeating unit represented by the below formula (3),



~~wherein Ar<sup>1</sup> and Ar<sup>2</sup> represent the same meaning in Claim 1,~~ R<sup>11</sup> and R<sup>12</sup> each independently represent a hydrogen atom, halogen atom, alkyl group, aryl group, arylalkyl group, or monovalent heterocyclic group, and may be mutually connected to form a ring, and X<sup>5</sup> represents O, S, C(=O), S(=O), SO<sub>2</sub>, Si(R<sup>3</sup>)(R<sup>4</sup>), N(R<sup>5</sup>), B(R<sup>6</sup>), P(R<sup>7</sup>) or P(=O)(R<sup>8</sup>), and R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> represent the same meaning as in Claim 1.

4. (previously presented): A polymer compound according to Claim 3, wherein the repeating unit represented by the above formula (3) is a repeating unit represented by the below formula (4),

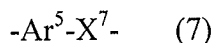
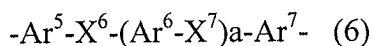


wherein X<sup>5</sup>, R<sup>11</sup> and R<sup>12</sup> represent the same meaning as in Claim 3, R<sup>13</sup>, R<sup>14</sup>, R<sup>15</sup>, R<sup>16</sup>, R<sup>17</sup>, and R<sup>18</sup> each independently represent a hydrogen atom, halogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, arylalkylthio group, acyl group, acyloxy group, amide group, acid imide group, imine residue, amino group, substituted amino group, substituted silyl group, substituted silyloxy group, substituted silylthio group, substituted silylamino group, a monovalent heterocyclic group, arylalkenyl group, aryl ethynyl group, carboxyl group, or cyano group, and R<sup>14</sup> and R<sup>15</sup>, and R<sup>16</sup> and R<sup>17</sup> may be connected mutually to form a ring.

5. (original): A polymer compound according to Claim 4, wherein X<sup>5</sup> in the above formula (4) is an oxygen atom.

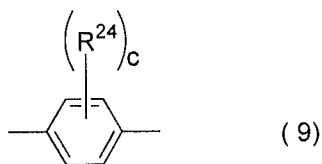
6. (currently amended): A polymer compound according to claim 1, wherein the repeating unit represented by the above formula (1) or (2), is included, and further the repeating unit represented by the below formula (5), formula (6), formula (7), or formula (8) is included,



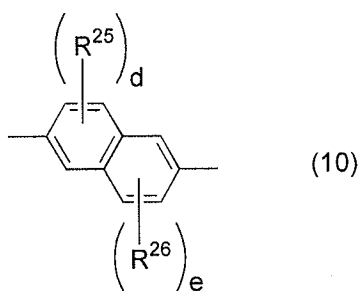


wherein  $\text{Ar}^5$ ,  $\text{Ar}^6$ , and  $\text{Ar}^7$  each independently represent an arylene group, divalent heterocyclic group, or divalent group having metal complex structure,  $\text{X}^6$  represents  $-\text{C}\equiv\text{C}-$ ,  $-\text{N}(\text{R}^{21})-$  or  $-(\text{SiR}^{22}\text{R}^{23})_{y\text{b}}-$ ,  $\text{X}^7$  represents  $-\text{CR}^{19}=\text{CR}^{20}-$ ,  $-\text{C}\equiv\text{C}-$ ,  $-\text{N}(\text{R}^{21})-$  or  $-(\text{SiR}^{22}\text{R}^{23})_{y\text{b}}-$ ,  $\text{R}^{19}$  and  $\text{R}^{20}$  each independently represent a hydrogen atom, alkyl group, aryl group, monovalent heterocyclic group, carboxyl group or cyano group,  $\text{R}^{21}$ ,  $\text{R}^{22}$  and  $\text{R}^{23}$  each independently represent a hydrogen atom, alkyl group, aryl group, monovalent heterocyclic group or arylalkyl group,  $a$  represents an integer of 0-1, and  $b$  represents an integer of 1-12.

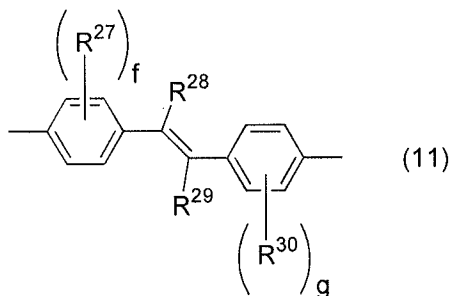
7. (currently amended): A polymer compound according to claim 6, wherein formula (5) is a repeating unit represented by the below formula (9), (10), (11), (12), (13), or (14),



wherein  $\text{R}^{24}$  represents a halogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, aryl alkylthio group, acyl group, acyloxy group, amide group, acid imide group, imino group, amino group, substituted amino group, substituted silyl group, substituted silyloxy group, substituted silylthio group, substituted silylamino group, monovalent heterocyclic group, arylalkenyl group, aryl ethynyl group, carboxyl group, or cyano group, and  $c$  represents an integer of 0-4,

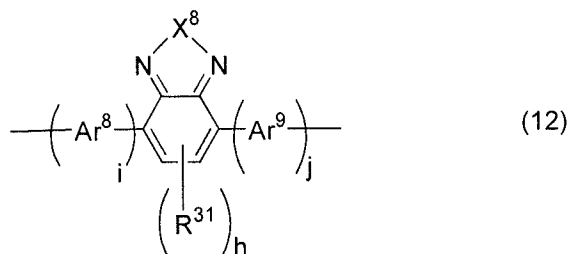


wherein  $R^{25}$  and  $R^{26}$  each independently represent a halogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, arylalkylthio group, acyl group, acyloxy group, amide group, acid imide group, imino group, amino group, substituted amino group, substituted silyl group, substituted silyloxy group, substituted silylthio group, substituted silylamino group, monovalent heterocyclic group, arylalkenyl group, arylolefinyl group, carboxyl group, or cyano group, and  $d$  and  $e$  each independently represent an integer of 0-3,

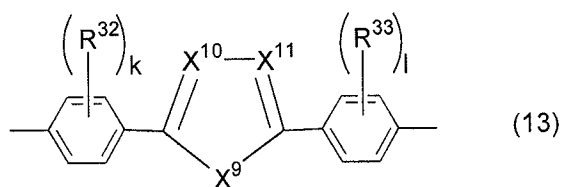


wherein  $R^{27}$  and  $R^{30}$  each independently represent a halogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, arylalkylthio group, acyl group, acyloxy group, amide group, acid imide group, imino group, amino group, substituted amino group, substituted silyl group, substituted silyloxy group, substituted silylthio group, substituted silylamino group, monovalent heterocyclic group, arylalkenyl group, arylolefinyl group, carboxyl group, or cyano group, and  $R^{28}$  and  $R^{29}$  each independently represent a hydrogen atom, alkyl group, aryl group, monovalent heterocyclic

group, carboxyl group, or cyano group, and f and g each independently represent an integer of 0-2.

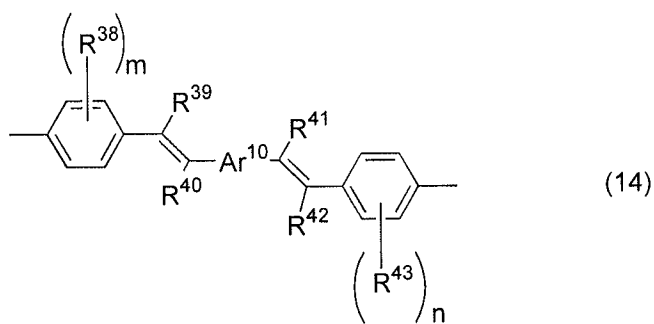


wherein  $R^{31}$  represent a halogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, aryl alkylthio group, acyl group, acyloxy group, amide group, acid imide group, imino group, amino group, substituted amino group, substituted silyl group, substituted silyloxy group, substituted silylthio group, substituted silylamino group, monovalent heterocyclic group, arylalkenyl group, aryl ethynyl group, carboxyl group, or cyano group, h represents an integer of 0-2,  $Ar^8$  and  $Ar^9$  each independently represent an arylene group, divalent heterocyclic group, or a divalent group having metal complex structure, i and j each independently represent 0 or 1, and  $X^8$  represents O, S, SO,  $SO_2$ , Se or Te,



wherein  $R^{32}$  and  $R^{33}$  each independently represent a halogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, arylalkylthio group, acyl group, acyloxy group, amide group, acid imide group, imino group, amino group, substituted amino group, substituted silyl group, substituted silyloxy group, substituted silylthio group, substituted silylamino group, monovalent heterocyclic group,

arylalkenyl group, arylethynyl group, carboxyl group, or cyano group, k and l each independently represent an integer of 0-4,  $X^9$  represents O, S, SO, SO<sub>2</sub>, Se, Te, N-R<sup>34</sup>, or SiR<sup>35</sup>R<sup>36</sup>,  $X^{10}$  and  $X^{11}$  each independently represent N or C-R<sup>37</sup>, and R<sup>34</sup>, R<sup>35</sup>, R<sup>36</sup> and R<sup>37</sup> each independently represent a hydrogen atom, alkyl group, aryl group, arylalkyl group or a monovalent heterocyclic group,



wherein R<sup>38</sup> and R<sup>43</sup> each independently represent a halogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, arylalkylthio group, acyl group, acyloxy group, amide group, acid imide group, imino group, amino group, substituted amino group, substituted silyl group, substituted silyloxy group, substituted silylthio group, substituted silylamino group, monovalent heterocyclic group, arylalkenyl group, arylethynyl group, carboxyl group, or cyano group, m and n each independently represent an integer of 0-4, R<sup>39</sup>, R<sup>40</sup>, R<sup>41</sup>, and R<sup>42</sup> each independently represent a hydrogen atom, alkyl group, aryl group, monovalent heterocyclic group, carboxyl group, or cyano group, and Ar<sup>10</sup> represents an arylene group, divalent heterocyclic group, or a divalent group having metal complex structure.

8. (previously presented): A polymer compound according to Claim 1, wherein the repeating unit represented by the above formula (1) or (2) is included, and further the repeating unit represented by the below formula (15) is included,

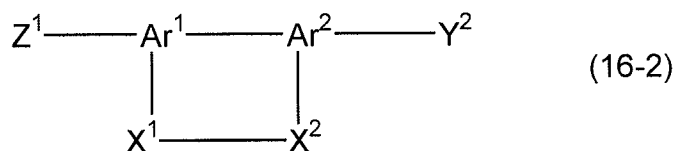


9. (previously presented): A polymer compound according to Claim 1, wherein the total of the repeating unit represented by formula (1) and (2) is 10% by mole or more based on whole repeating units.

11. (previously presented): A polymer compound according to Claim 1, having fluorescence in the solid state.

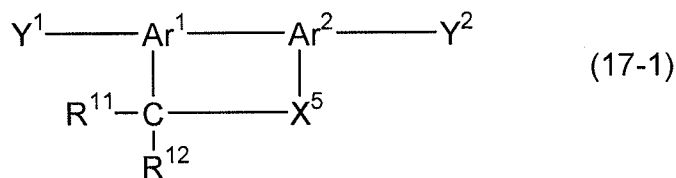
$$\begin{array}{c} Y^1 - Ar^1 - Ar^2 - Y^2 \\ | \quad \quad | \\ X^1 - X^2 \end{array} \quad (16-1)$$

wherein  $\text{Ar}^1$  and  $\text{Ar}^2$  each independently represent a trivalent aromatic hydrocarbon group or a trivalent heterocyclic group,  $\text{X}^1$  and  $\text{X}^2$  each independently represent O, S,  $\text{C}(=\text{O})$ ,  $\text{S}(=\text{O})$ ,  $\text{SO}_2$ ,  $\text{C}(\text{R}^1)(\text{R}^2)$ ,  $\text{Si}(\text{R}^3)(\text{R}^4)$ ,  $\text{N}(\text{R}^5)$ ,  $\text{B}(\text{R}^6)$ ,  $\text{P}(\text{R}^7)$  or  $\text{P}(=\text{O})(\text{R}^8)$ , and wherein  $\text{R}^1$ ,  $\text{R}^2$ ,  $\text{R}^3$ ,  $\text{R}^4$ ,  $\text{R}^5$ ,  $\text{R}^6$ ,  $\text{R}^7$ , and  $\text{R}^8$  each independently represent a hydrogen atom, halogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, aryl alkylthio group, acyl group, acyloxy group, amide group, acid imide group, imine residue, amino group, substituted amino group, substituted silyl group, substituted silyloxy group, substituted silylthio group, substituted silylamino group, monovalent heterocyclic group, arylalkenyl group, aryl ethynyl group, carboxyl group, or cyano group.  $\text{R}^1$  and  $\text{R}^2$ , or  $\text{R}^3$  and  $\text{R}^4$  may be connected mutually to form a ring,  $\text{X}^1$  and  $\text{X}^2$  are not the same,  $\text{X}^1$  and  $\text{Ar}^2$  bond to adjacent carbons in the aromatic ring of  $\text{Ar}^1$ , and  $\text{X}^2$  and  $\text{Ar}^1$  bond to adjacent carbons in the aromatic ring of  $\text{Ar}^2$ ,  $\text{Y}^1$  and  $\text{Y}^2$  each independently represent a halogen atom, alkylsulfonate group, arylsulfonate group, arylalkylsulfonate group, boric ester group, sulfonium methyl group, phosphonium methyl group, phosphonate methyl group, monohalogenated methyl group, boric acid group, formyl group, or vinyl group,

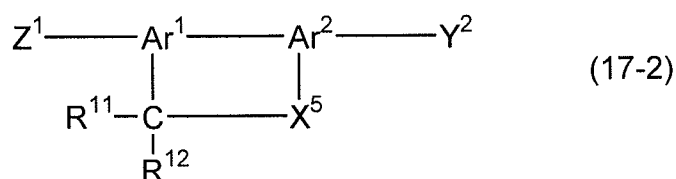


wherein  $\text{Ar}^1$ ,  $\text{Ar}^2$ ,  $\text{X}^1$ ,  $\text{X}^2$ , and  $\text{Y}^2$  are the same as identified above,  $\text{Z}^1$  represents a hydrogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, aryl alkylthio group, substituted amino group, substituted silyl group, monovalent heterocyclic group, arylalkenyl group, or aryl ethynyl group.

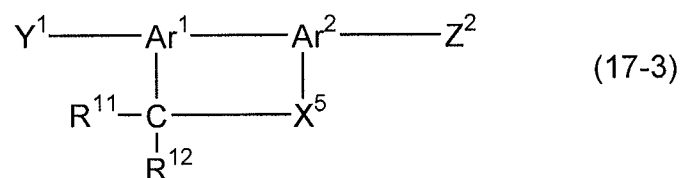
13. (withdrawn): A compound according to Claim 12, represented by the below formula (17-1), (17-2), or (17-3),



wherein Ar<sup>1</sup>, Ar<sup>2</sup>, R<sup>11</sup>, R<sup>12</sup>, X<sup>5</sup>, Y<sup>1</sup>, and Y<sup>2</sup> represent the same meaning as defined above,

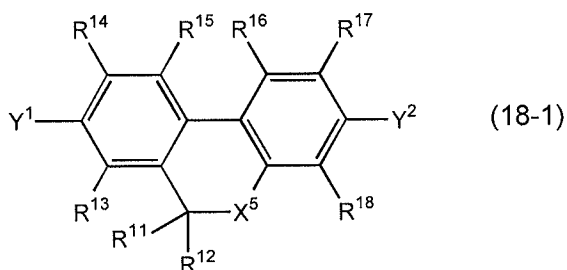


wherein Ar<sup>1</sup>, Ar<sup>2</sup>, R<sup>11</sup>, R<sup>12</sup>, X<sup>5</sup>, Y<sup>2</sup>, and Z<sup>1</sup> represent the same meaning as defined above,

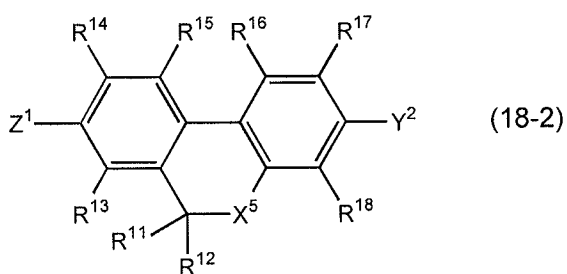


wherein Ar<sup>1</sup>, Ar<sup>2</sup>, R<sup>11</sup>, R<sup>12</sup>, X<sup>5</sup>, and Y<sup>1</sup> represent the same meaning as defined above, Z<sup>2</sup> represents a hydrogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, arylalkylthio group, substituted amino group, substituted silyl group, monovalent heterocyclic group, arylalkenyl group, or aryl ethynyl group.

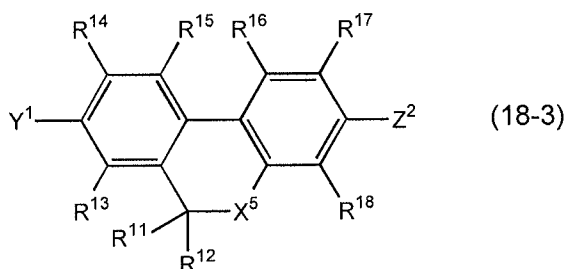
14. (withdrawn): A compound according to Claim 13, represented by the below formula (18-1), (18-2), or (18-3),



wherein  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$ ,  $R^{14}$ ,  $R^{15}$ ,  $R^{16}$ ,  $R^{17}$ ,  $R^{18}$ ,  $X^5$ ,  $Y^1$ , and  $Y^2$  represent the same meaning as defined above,



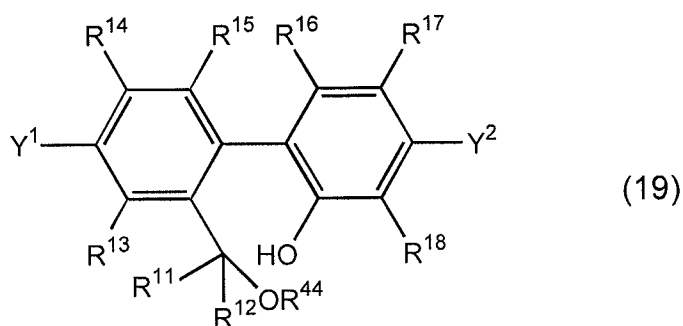
wherein  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$ ,  $R^{14}$ ,  $R^{15}$ ,  $R^{16}$ ,  $R^{17}$ ,  $R^{18}$ ,  $X^5$ ,  $Y^2$ , and  $Z^1$  represent the same meaning as defined above,



wherein  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$ ,  $R^{14}$ ,  $R^{15}$ ,  $R^{16}$ ,  $R^{17}$ ,  $R^{18}$ ,  $X^5$ ,  $Y^1$ , and  $Z^2$  represent the same meaning as defined above.

15. (withdrawn): A compound according to Claim 14, wherein  $X^5$  is an oxygen atom in the above formula (18-1), (18-2), or (18-3).

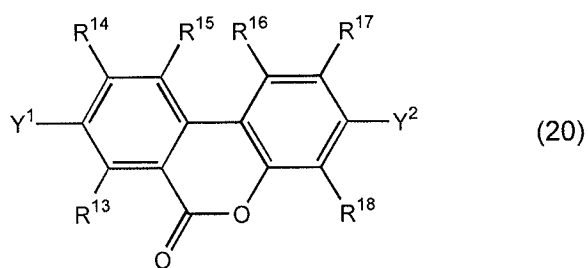
16. (withdrawn): A compound represented by the below formula (19),



wherein  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$ ,  $R^{14}$ ,  $R^{15}$ ,  $R^{16}$ ,  $R^{17}$ ,  $R^{18}$ ,  $Y^1$ , and  $Y^2$  represent the same meaning as defined above, and  $R^{44}$  represents a hydrogen atom, alkyl group, aryl group, arylalkyl, or a monovalent heterocyclic group.

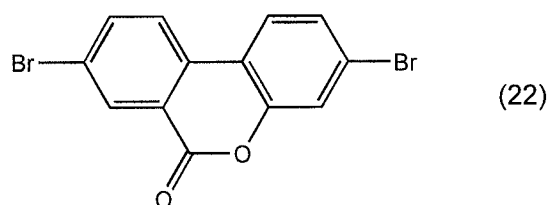
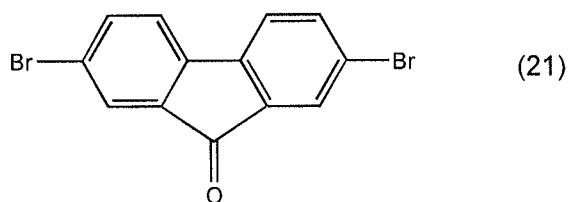
17. (withdrawn): A manufacture method of the compound of Claim 15, wherein the compound represented by the above formula (19) is contacted with acid.

18. (withdrawn): A manufacture method of a compound having a hydrogen atom as  $R^{44}$  in the compounds represented by the above formula (19), wherein a compound represented by the below formula (20), is reacted with a Grignard reagent, or organo Li compound,

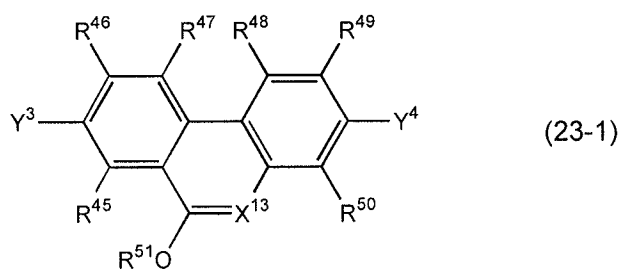


wherein  $R^{13}$ ,  $R^{14}$ ,  $R^{15}$ ,  $R^{16}$ ,  $R^{17}$ ,  $R^{18}$ ,  $Y^1$ , and  $Y^2$  represent the same meaning as defined above.

19. (withdrawn): A manufacture method of the compound represented by the below formula (22), wherein the compound represented by the below formula (21) is reacted with sodium perborate,

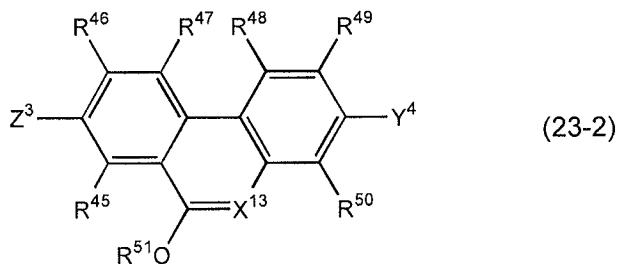


20. (withdrawn): A compound represented by the below formula (23-1), (23-2), (23-3), (24-1), (24-2), or (24-3),

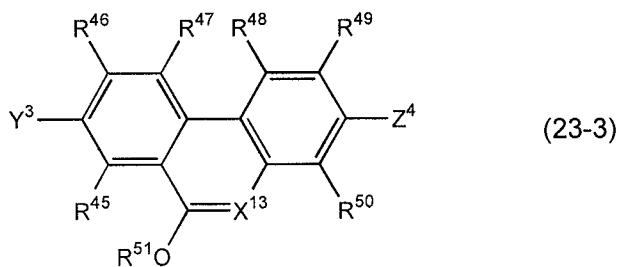


wherein  $X^{13}$  represents a boron atom, a nitrogen atom, or a phosphorus atom,  $Y^3$  and  $Y^4$  each independently represent a halogen atom, alkylsulfonate group, arylsulfonate group, arylalkylsulfonate group, boric ester group, sulfonium methyl group, phosphonium methyl group, phosphonate methyl group, monohalogenated methyl group, boric acid group, formyl group, or vinyl group,  $R^{45}$ ,  $R^{46}$ ,  $R^{47}$ ,  $R^{48}$ ,  $R^{49}$ , and  $R^{50}$ , each independently represent a hydrogen atom, halogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group,

arylthio group, arylalkyl group, arylalkyloxy group, aryl alkylthio group, acyl group, acyloxy group, amide group, imide group, imine residue, amino group, substituted amino group, substituted silyl group, substituted silyloxy group, substituted silylthio group, substituted silylamino group, a monovalent heterocyclic group, arylalkenyl group, aryl ethynyl group, carboxyl group, or cyano group,  $R^{46}$  and  $R^{47}$ , or  $R^{48}$  and  $R^{49}$  may be connected mutually to form a ring, and  $R^{51}$  represents an alkyl group, aryl group, arylalkyl group, or monovalent heterocyclic group,

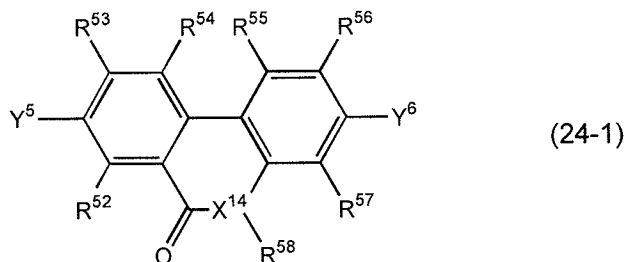


wherein  $R^{45}$ ,  $R^{46}$ ,  $R^{47}$ ,  $R^{48}$ ,  $R^{49}$ ,  $R^{50}$ ,  $R^{51}$ ,  $X^{13}$ , and  $Y^4$  represent the same meaning as defined above,  $Z^3$  represents a hydrogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, aryl alkylthio group, substituted amino group, substituted silyl group, a monovalent heterocyclic group, arylalkenyl group, or aryl ethynyl group,

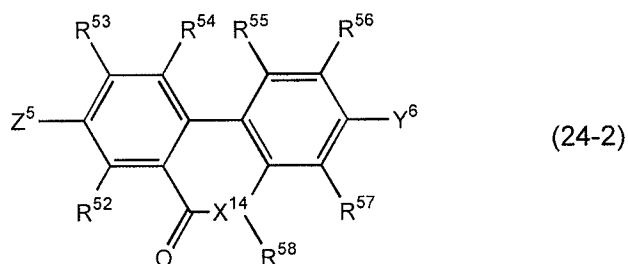


wherein  $R^{45}$ ,  $R^{46}$ ,  $R^{47}$ ,  $R^{48}$ ,  $R^{49}$ ,  $R^{50}$ ,  $R^{51}$ ,  $X^{13}$ , and  $Y^3$  represent the same meaning as defined above,  $Z^4$  represents a hydrogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, arylalkylthio group,

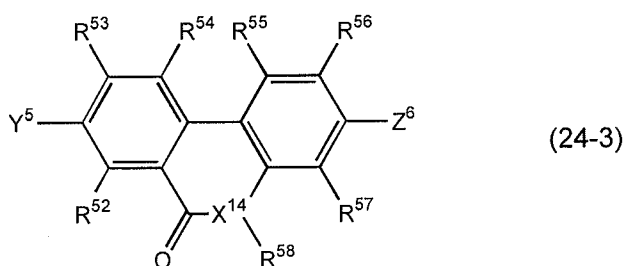
substituted amino group, substituted silyl group, a monovalent heterocyclic group, arylalkenyl group, or aryl ethynyl group,



wherein  $X^{14}$  represents a boron atom, nitrogen atom, or phosphorus atom,  $Y^5$  and  $Y^6$  each independently represent a halogen atom, alkylsulfonate group, arylsulfonate group, arylalkylsulfonate group, boric ester group, sulfonium methyl group, phosphonium methyl group, phosphonate methyl group, monohalogenated methyl group, boric acid group, formyl group, or vinyl group,  $R^{52}$ ,  $R^{53}$ ,  $R^{54}$ ,  $R^{55}$ ,  $R^{56}$ , and  $R^{57}$  each independently represent a hydrogen atom, halogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, aryl alkylthio group, acyl group, acyloxy group, amide group, imide group, imine residue, amino group, substituted amino group, substituted silyl group, substituted silyloxy group, substituted silylthio group, substituted silylamino group, monovalent heterocyclic group, arylalkenyl group, aryl ethynyl group, carboxyl group, or cyano group,  $R^{53}$  and  $R^{54}$ , or  $R^{55}$  and  $R^{56}$  may be connected mutually to form a ring, and  $R^{58}$  represents an alkyl group, aryl group, arylalkyl group, or a monovalent heterocyclic group,

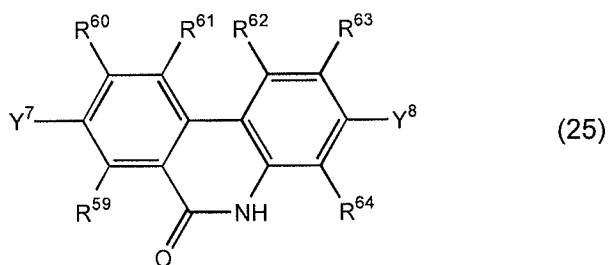


wherein  $R^{52}$ ,  $R^{53}$ ,  $R^{54}$ ,  $R^{55}$ ,  $R^{56}$ ,  $R^{57}$ ,  $R^{58}$ ,  $X^{14}$ , and  $Y^6$  represent the same meaning as defined above,  $Z^5$  represents a hydrogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, aryl alkylthio group, substituted amino group, substituted silyl group, monovalent heterocyclic group, arylalkenyl group, or aryl ethynyl group,



wherein  $R^{52}$ ,  $R^{53}$ ,  $R^{54}$ ,  $R^{55}$ ,  $R^{56}$ ,  $R^{57}$ ,  $R^{58}$ ,  $X^{14}$ , and  $Y^5$  represent the same meaning as defined above, and  $Z^6$  represents a hydrogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, aryl alkylthio group, substituted amino group, substituted silyl group, monovalent heterocyclic group, arylalkenyl group, or aryl ethynyl group.

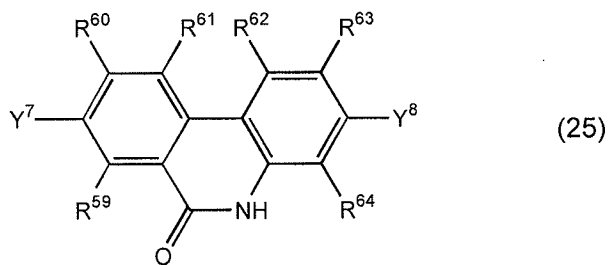
21. (withdrawn): A compound represented by the below formula (25),



wherein  $Y^7$  and  $Y^8$  each independently represent a halogen atom, alkylsulfonate group, arylsulfonate group, arylalkylsulfonate group, boric ester group, sulfonium methyl group, phosphonium methyl group, phosphonate methyl group, monohalogenated methyl group, boric

acid group, formyl group, or vinyl group,  $R^{59}$ ,  $R^{60}$ ,  $R^{61}$ ,  $R^{62}$ ,  $R^{63}$ , and  $R^{64}$  each independently represent a hydrogen atom, halogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, arylalkylthio group, acyl group, acyloxy group, amide group, imide group, imine residue, amino group, substituted amino group, substituted silyl group, substituted silyloxy group, substituted silylthio group, substituted silylamino group, a monovalent heterocyclic group, arylalkenyl group, aryl ethynyl group, carboxyl group, or cyano group, and  $R^{60}$  and  $R^{61}$ , or  $R^{62}$  and  $R^{63}$  may be connected mutually to form a ring.

22. (withdrawn): A manufacture method of a compound as recited in Claim 20 wherein in the above formula (23-1) to (23-3)  $X^{13}$  is a nitrogen atom, or a compound in the above formula (24-1) to (24-3) wherein  $X^{14}$  is a nitrogen atom, wherein the compound represented by formula (25) is reacted with a halogenated alkyl, halogenated aryl, halogenated arylalkyl, or halogenated heterocyclic-ring compound in existence of a base,



wherein  $Y^7$  and  $Y^8$  each independently represent a halogen atom, alkylsulfonate group, arylsulfonate group, arylalkylsulfonate group, boric ester group, sulfonium methyl group, phosphonium methyl group, phosphonate methyl group, monohalogenated methyl group, boric acid group, formyl group, or vinyl group,  $R^{59}$ ,  $R^{60}$ ,  $R^{61}$ ,  $R^{62}$ ,  $R^{63}$ , and  $R^{64}$  each independently represent a hydrogen atom, halogen atom, alkyl group, alkyloxy group, alkylthio group, aryl

group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, arylalkylthio group, acyl group, acyloxy group, amide group, imide group, imine residue, amino group, substituted amino group, substituted silyl group, substituted silyloxy group, substituted silylthio group, substituted silylamino group, a monovalent heterocyclic group, arylalkenyl group, aryl ethynyl group, carboxyl group, or cyano group, and  $R^{60}$  and  $R^{61}$ , or  $R^{62}$  and  $R^{63}$  may be connected mutually to form a ring.

23. (previously presented): A composition comprising a polymer compound according to Claim 1, and at least one kind of material selected from a hole transporting material, an electron transporting material and a light-emitting material.

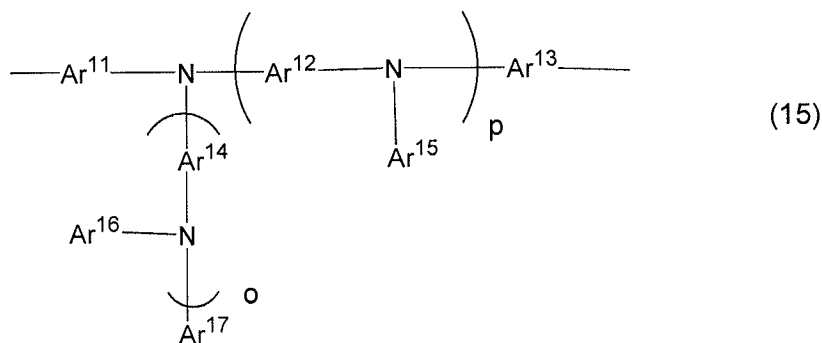
24. (previously presented): An ink composition comprising a polymer compound according to Claim 1.

25. (previously presented): A light emitting thin film, a conductive thin film, or an organic semiconductor thin film, comprising a polymer compound according to Claim 1.

26. (previously presented): A polymer light-emitting device having an organic layer between electrodes consisting of an anode and a cathode, and the organic layer containing a polymer compound according to Claim 1.

27. (original): A polymer light-emitting device according to claim 26, wherein the organic layer is a light emitting layer.

31. (new): A polymer compound according to Claim 2, wherein the repeating unit represented by the above formula (1) or (2) is included, and further the repeating unit represented by the below formula (15) is included,



22

32. (new): A polymer compound according to Claim 2, wherein the total of the repeating unit represented by formula (1) and (2) is 10% by mole or more based on whole repeating units.

33. (new): A polymer compound according to Claim 2, having liquid-crystal property.

34. (new): A polymer compound according to Claim 2, having fluorescence in the solid state.

35. (new): A composition comprising a polymer compound according to Claim 2, and at least one kind of material selected from a hole transporting material, an electron transporting material and a light-emitting material.

36. (new): An ink composition comprising a polymer compound according to Claim 2.

37. (new): A light emitting thin film, a conductive thin film, or an organic semiconductor thin film, comprising a polymer compound according to Claim 2.

38. (new): A polymer light-emitting device having an organic layer between electrodes consisting of an anode and a cathode, and the organic layer containing a polymer compound according to Claim 2.

39. (new): A polymer light-emitting device according to claim 38, wherein the organic layer is a light emitting layer.

40. (new): A polymer light-emitting device according to claim 39, wherein a light emitting layer contains further a hole transporting material, an electron transporting material, or a light-emitting material.

41. (new): A flat light source, segment display material, or dot matrix display apparatus, comprising a polymer light-emitting device according to Claim 38, as a back light.

42. (new): A liquid crystal display, comprising a polymer light-emitting device according to Claim 38.